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ABSTRACT

A nationwide telephone survey of 1,761 adults was conducted in 1985 to measure the impact of the 4-H program to help young people develop basic competency, coping, and contributory life skills needed to become self-directing, productive, and contributing members of society. Findings indicated that, overall, 4-H alumni and past participants of other youth programs were more alike than nonparticipants in terms of race, age, era of participation, level of educational attainment, and high school academic achievement. Nonparticipants had slightly more minority representation, were older, and had lower levels of educational attainment. While 4-H alumni resided in rural areas most of their lives, other participants were primarily urban residents. Although 4-H alumni participated 2 fewer years on average than other participants, participation of both groups waned during teen years to less than 15%. Most useful experiences for 4-H and other participants were contact with others within "the program" and opportunities to develop skills and make a contribution to the program. While 4-H alumni were less satisfied than other participants in opportunities for leadership, majorities of both groups wanted more leadership opportunities. Both groups felt that learning to work with others and developing a sense of responsibility contributed most toward personal development. (NEC)

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Adult Assessments of Social Learning Experiences During Adolescent Participation in 4-H and Other Youth Programs

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Adult Assessments of Social Learning Experiences During Adolescent Participation in 4-H and Other Youth Programs

Introduction

The turn of the century marked the transition of the United States from an agrarian-based society to an industrial-based one. At that time, social values were in a state of flux, there was a new urbanism, and American education was trying to develop a national meaning. In the midst of this cultural milieu, the 4-H youth program originated and evolved as the largest nontraditional educational efforts in public education in the United States. For nearly 80 years, 4-H has existed, in part, to help young people become mature, competent adults (Weatherford and Peck, 1984). It has strived to accomplish this goal through the four "H's" which stand for head, heart, hands, and health and represent the well-rounded development of young people.

Over the years, efforts to assess the effectiveness of the 4-H program have been guided by the belief that only persons satisfied with the type of experiences offered in 4-H would become or remain voluntary participants of 4-H. Accordingly, most evaluation studies emphasized input-enrollment efficiency and the program's ability to reach increasing numbers of participants (Meyers, 1980). While this type of evaluation has provided answers to such questions as "how much and what are you doing with whom?", it has not addressed the impact of 4-H on its participants. In today's environment of complex problems, budget restraints, and expensive program alternatives, evidence is needed concerning "who has benefited, by how much, and what difference does it make that individuals participated in 4-H?"

Recent efforts to collect and analyze specific evidence of the impact of 4-H on its participants, however, have not been well-received. Some

believe that accountability requirements could undermine and destroy much of what was envisioned as the 4-H key to success--decentralized programming. Others contend that evaluation and ongoing monitoring need not infringe upon the essence of he 4-H success story and could be a useful tool for improvising and updating the program (Cirincone-Coles, 1980).

Although the debate has not been resolved, several points have emerged. First, there is not clear agreement on the contribution of different components of an effective 4-H program. Second, evidence of the contribution of 4-H program components is being called for by federal and state legislative mandate. Third, few systematic efforts have been undertaken to determine the impact of the 4-H experience on former 4-H members. Fourth, to determine reliable answers to the question "what difference did it make that people participated in 4-H?" requires a rigorous evaluation research design.

In this paper, we present findings from a national study that attempts to determine what effects, if any, 4-H and other youth organizations have had on adolescents' social learning experiences. Also, we examine whether or not experiential differences existed among participants from several program eras.

Experiential Education

Emphasis by developers of the 4-H concept on learner growth through experiences in public education was influenced largely by such early philosophers as William James and John Dewey, who articulated the American approach to education as a combination of abstract instruction and learning by doing (Wessel and Wessel, 1982). The goal of experiential education is not simply the use of experiences to better learn an idea or skill. Experiential education goes beyond traditional goals of teaching a skill

and creates an environment in which the learner is actively involved in his or her own learning.

This active involvement in one's own learning, in turn, contributes to the development of life skills which, according to Himsl (1973:13-25), means

> problem solving behaviors appropriately and responsibly used in the management of personal affairs. As problem solving behaviors, life skills liberate in a way, since they include a relatively small class of behaviors usable in many life situations. Appropriate use requires an individual to adapt the behaviors to time and place. Responsible use requires maturity or accountability. And as behaviors used in the management of personal affairs the life skills apply to five areas of life responsibility identified as self, family, leisure, community, and job.

Mullen (1981) further illustrates the development of life skills by placing them into three domains. First, participants of life skills programs respond to subject-matter content. Second, learning in a group setting enables participants to learn new problem solving behaviors and develop skills of self-expressions. Finally, new behaviors and skills enable participants to progress in the problem-solving dimension. Development of life skills implies balanced self-determinism in which individuals are free to choose how to act because they not only know how to go about solving problems and how to conduct themselves effectively in relation to others, but they also have an understanding of their self worth and worth of others.

These three domains, conceptualized as competency, coping, and contributory, have been summarized by Weatherford and Peck (1983):

> Competency life skills are those skills and bodies of knowledge which individuals must possess to perform at a "competent" level within any given subject area. Tied to these subject matter based competencies are those skills needed to both acquire and maintain a continuation of those competencies.

Coping life skills utilize competency skills within group applications. Relief of stressful situations through the development of situations in which effective group action can take place is a primary focus of this family of skills. Working together with others is the central skill, but related to it are those skills necessary to maintain competency and coping life skill areas necessary to be a productive and competent adult.

Contributory life skills constitute a family of skills which lead toward altruistic attitudes and behaviors. Utilization of competency and coping skills to benefit not just self and close others but for the benefit of the total good is the central thesis. "Generativity" is the state that Erickson (1968) describes as a more mature developmental stage adolescents and adults move toward. This "giving back" is not only significant to the growth of an individual but to any organization (such as 4-H programs) which seeks to utilize others within spiral programming. These skills, while very much related to leadership competencies, include an array of prosocial behaviors which include good "followership" as well as leadership. Sharing, coaching, and mentorship skills are all the type of "higher order" life skills which follow competency and coping level life skills.

This study utilizes the life skills perspective as a guide in attempting to measure the impact of the 4-H program to help young people develop the basic competency (knowledge and skills), coping (self-expression in group settings) and contributory (increasing sharing skills with others) life skills needed to become self-directing, productive, and contributing members of society. A general model of youth experiential learning (presented in Figure 1) will be followed in this study. The model depicts life skills an individual develops as a youth being affected by the type and quality of organizational learning experiences an individual encounters. Such learning experiences are influenced by specific background characteristics of an individual's.

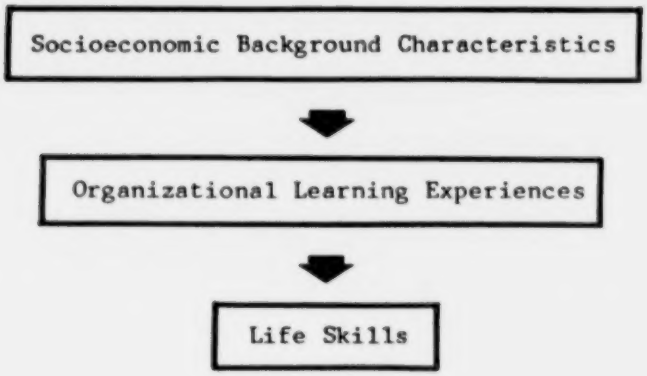

Figure 1: Youth Experiential Learning Model

Methodology

A nationwide telephone survey was conducted in the Fall of 1985 by the Texas Agricultural Extension Service in cooperation with the Department of Rural Sociology in the Texas Agricultural Experiment Station. In designing the study, representatives from these groups used the 4-H administrative regions--northeast, south, north central, and west--and 4-H/non 4-H membership status to stratify the sample. Overall, 1,761 adults responded to the survey. The total number of respondents among the four regions and between each sex varied slightly more than was expected. Consequently, the data were weighted to adjust for these differences. A detailed description of the weighting procedure is presented by Ladewig and Thomas (1986). The regional weighted sample is shown by membership status and sex in Table 1. The total weighted sample size was 16,177.

[Table 1 about here]

Statistical Analyses

To analyze the evaluations of prior participants in 4-H and other youth organizations, respondents were sorted into three groups--former participants in 4-H (4-H alumni), participants in other youth organizations excluding 4-H (other participants), and nonparticipants. Analyses of the weighted data were conducted in several ways. Descriptive statistics (means and standard deviations) were calculated to identify general patterns among the data. Next, tests of significant difference were conducted using three techniques. The Chi-square test was applied to categorical data when particular groups were compared on selected background characteristics and program experiences. Student's t-test was calculated to determine differences between means of noncategorical data such as attitudinal ratings of program experiences. While the background characteristics of all three were compared for heuristic purposes, subsequent analyses were focused on former 4-H and other youth organizational participants.

Evaluation Variables

Several series of questions were asked to determine how respondents evaluated the usefulness of their program experiences, the challenges and responsibilities (problem solving) experienced in their participation, how they perceived participation contributing to their personal development, what their overall attitude was toward activities and directions of the organizations to which the respondents belonged as youth, and what influences from program participation did they perceive on their educational attainment and career expectations. In an additional set of questions, 4-H alumni who had memberships in other youth programs were asked to compare their experiences in 4-H with experiences in other programs.

Findings

The findings are divided into two sections. The first section compares the background characteristics of all respondents by program of participation (4-H, other, none). The second section focuses on reporting comparative results for only 4-H and other program participants.

Personal Characteristics of Youth Program Participants and Nonparticipants

Several background characteristics were examined to identify potential differences among the three study groups. In Table 2, sex, race, age, and residential characteristics are compared. While almost equal percentages of males and females responded during the survey, some differences occurred elsewhere, particularly between past participants and nonparticipants in youth programs. Former 4-H'ers were primarily white, less than 50 years of age, and resided most of their lives in rural areas. Fifty-three percent were reared on farms and ranches, or in communities with less than 2,500 population. Other youth program participants had similar characteristics but had lived most of their lives in urban areas. Sixty percent were reared in cities with 10,000 or more population. The majority of nonparticipants were white, older than 50 years of age, and while most were urban-reared, a large group (35%) had lived in rural areas. Overall, few minorities participated in the study compared to their representation in the general public. Nonparticipants had the largest representation for these racial groups with 20 percent.

[Table 2 about here]

Educational attainment and achievement characteristics are reported in Table 3. A large majority of each group had at least high school

education. Participants of other youth programs were slightly more likely to have earned college and professional degrees. Nonparticipants reported the least attainment; 29 percent failed to graduate from high school compared to 8 percent or less of the other two groups. To determine educational achievement, all respondents were asked to describe their high school academic grade performance. Achievement patterns were similar across each group. Five percent or less reported grades lower than a C average, while 57 percent or more claimed achieving B and higher averages.

[Table 3 about here]

Value of Youth Organizational Participation

This section of comparisons focuses on when participants joined youth programs and on the value that both 4-H alumni and other participants placed on different types of youth organizational experiences. As explained in the methodology section, the determination of significant differences between group ratings are based on Student's t test of significant differences between means.

Joining Youth Programs. Participants in all youth programs were asked about when they joined 4-H, their age when joining, and how many years they participated. Results, shown in Table 4, include significant differences between 4-H alumni and other participants. While more than 60 percent of both groups reported having been members prior to 1965, slightly more 4-H respondents had joined then. Average entry age was 11 for 4-H'ers and 10 for other participants. Almost 75 percent of all 4-H alumni joined between the ages of 9 and 12; much of this due to eligibility beginning at nine years of age. In comparison, almost 70 percent of other participants were members before the age of ten; 46 percent were members when they were eight

years of age or younger. It is also important to note that less than 15 percent of both groups began participation when they were teenagers. Another interesting finding is duration of membership. 4-H alumni averaged 4.1 years of membership compared to 6 years by other participants. Much of the difference between the two groups resulted from only 15 percent of the 4-H alumni participating 7 and more years, while 38 percent of the other participants had long memberships. All of these results suggest that pre and early adolescence is the most common period for program participation, and that participation wanes during the teen years. Potential explanations for this occurrence may be provided in respondents' assessments of the quality of their experiences.

Usefulness of Experiences. Respondents were asked to rate on a scale of 1 (no influence) to 5 (much influence) the amount of influence that participation in 4-H ("youth programs" for other respondents) had on: (1) continuing their education through high school; (2) continuing their education beyond high school; (3) their choice of job/career; (4) their choice of college to attend; and (5) their preparation to assume leadership responsibilities.

As reported in Table 5, the most useful experiences for both 4-H alumni and other participants came from contact with other people in the organization. Second in usefulness was competition/activities followed by projects individuals worked on. It should be noted also that, while the order of the ratings was the same for both groups, 4-H alumni rated their experiences significantly higher than did other participants.

[Table 5 about here]

Frequency of Challenges and Responsibilities. 4-H and other participants were asked how often they experienced each of six challenges or responsibilities in their respective programs. For each challenge, they indicated whether they never, seldom, occasionally, often, or very often encountered it. These challenges were presented as: (1) How often were you given challenging tasks? (2) How often were you included in making important decisions? (3) How often were you involved in planning club activities? (4) How often did you have freedom to develop and use your own skills? (5) How often did you feel you made a contribution? (6) How often were you given an opportunity to lead others?

Responses to the frequency with which individuals experienced opportunities for challenges and responsibilities are presented in Table 5. For both groups, opportunities to develop skills and make a contribution received the highest ratings. Conversely, leadership opportunities received the lowest rating among 4-H alumni, while involvement in making important decisions was rated lowest by other participants. In comparing the ratings of 4-H to that of other participants, 4-H ratings were significantly higher for opportunities for challenging tasks, making important decisions, and freedom to develop skills. Other participant ratings were significantly higher for leadership opportunities. It should be noted also that the majority of both groups wanted more leadership opportunities.

Contributions to Personal Development. Youth development programs can contribute to personal development in a number of ways. To determine the contribution of organizational experiences on personal development, former participants were presented nine ways and asked to rate each on a scale of 1 to 5 with one being of no contribution and five being of great

contribution. The development areas were: (1) developing personal pride in achievements and progress; (2) developing self-confidence; (3) learning to work with others; (4) developing leadership skills; (5) developing the ability to communicate effectively; (6) acquiring skills necessary for employment; (7) developing a sense of responsibility; (8) setting personal goals; and (9) involvement in community activities.

As reported in Table 6, the largest contributions to personal development for both groups were learning to work with others and developing a sense of responsibility. Acquiring skills necessary for employment and involvement in community activities were rated by both groups as making the least contribution to personal development. Table 6 further indicates that 4-H alumni ratings were significantly higher than those of other participants for all nine activities. One implication of the consistency of higher rating for 4-H alumni is that 4-H makes a well-rounded contribution to the personal development of its members.

[Table 6 about here]

Attitudes Toward Youth Programs. Many youth development programs are faced with complaints about too much competition and too few programs of substance. To find out how respondents from both groups felt about these and other points, they were asked their opinions on six issues. For each issue statement, they were to indicate if they strongly disagreed (value = 1), slightly disagreed, slightly agreed, or strongly agreed with it (value = 5); uncertain responses were given a value of 3. The statements were: (1) the 4-H program placed too much emphasis on competition and awards; (2) 4-H had little to offer Junior High and High School youth; (3) 4-H kept young people busy and out of trouble more than most other youth programs;

(4) parents and leaders benefited in learning from 4-H projects; (5) The awards program in 4-H was a positive incentive that kept members in 4-H; and (6) knowledge and skills gained through 4-H have benefited 4-H members in their adult life. For other participants, questions were reworded to apply to their programs.

The strongest agreement by both groups was that knowledge and skills gained through participation in youth programs have benefited them in their adult life (Table 7). Second in degree of consensus for the 4-H alumni was that parents and leaders benefited in learning from 4-H projects, while other participants strongly believed that their organization kept young people busy and out of trouble more than other youth programs. The large majority of both groups disagreed with the statement that there was too much emphasis on competition and awards. The majority also disagreed with the statement that programs of their organization had little to offer junior high and high school youth. In comparing attitude rating of the two groups, 4-H alumni were significantly more supportive on all but one item--competition and awards. The two groups were not significantly different in their assessment of competition and awards.

[Table 7 about here]

Educational and Career Expectations. The final area in which 4-H alumni and other participants were asked the value of their experiences was education and career expectations. All were asked how much influence, if any, did participation in their respective programs influence the following: (1) continuing their education through high school; (2) continuing their education beyond high school; (3) their choice of job/career; (4) their choice of college to attend; and (5) their

preparation for assuming leadership responsibilities. Scale responses varied from none (value = 1) to very much (value = 5).

According to the findings presented in Table 8, the highest ratings of both groups were preparation for leadership and continuing their education through high school. In both cases, 4-H alumni rated the value of their experiences significantly higher than did other participants. No other rating comparisons were significantly different. Moreover, neither group rated its participation as having more than a modest influence on higher education and career attainment.

[Table 8 about here]

Alumni Comparisons of Programs. Nearly 53 percent of the 4-H alumni reported having had memberships in other youth organizations. Among these alumni, 40 percent had church memberships, 30 percent were in Scouts, 19 percent in FFA/FHA, 7 percent in YM/YWCA, 7 percent in Boys/Girls Club, and 4 percent in Campfire. Consequently, they were asked to compare and indicate whether 4-H or these other programs were more helpful (or were about the same in degree of helpfulness).

As shown in Table 9, six areas of experience were compared: (1) learning skills and subject knowledge; (2) learning leadership skills; (3) receiving responsibilities; (4) learning self confidence; (5) improving communication skills; and (6) developing cooperative skills and attitudes toward others. The results indicate that a significant number rated 4-H as more helpful in gaining knowledge and skills and in developing a feeling of self-worth. Conversely, a significant number of 4-H alumni felt that their experiences in other organizations were more helpful in developing leadership skills and receiving the most responsibilities. Helpfulness in

development of skills in communications and cooperation were evenly divided between 4-H and other organizations.

[Table 9 about here]

Comparison of Development Experiences by Membership Era

Youth development programs, like American society, have changed over the years. The content and direction of programs offered through 4-H and other youth development programs have had to adjust to changes in many areas including population, lifestyles, communications, technology, science, and education.

To determine if these changes in program direction and content had an impact on the development of life skills of program participants, the responses of 4-H alumni and participants in other youth programs were analyzed by program era (see Table 4). In other words, were there differences in the value of experiences when controlling for the time period of participation? For each of the variables reported in Table 10, Tukey's w-procedure indicated several differences between program eras. Yet, the magnitude of these differences were not necessarily meaningful since corresponding responses for the two groups of respondents were at similar levels. Freely (albeit cautiously) interpreted, the data suggest that regardless of time period, 4-H alumni and other participants place similar values on the usefulness of their experiences, challenges and responsibilities, personal development, and attitudes toward the youth programs in which they participated.

[Table 10 about here]

Summary and Conclusion

Overall, 4-H alumni and past participants of other youth programs were more alike than nonparticipants in terms of their race, years of age, era of participation, level of educational attainment, and high school academic achievement. Nonparticipants had slightly more minority representation, were older, and had lower levels of education attainment. Differences between 4-H alumni and other respondents were apparent with regard to where they resided most of their life (rural vs. urban, respectively).

The examination of membership tenure found that 4-H alumni participated two fewer years on average than other participants. Both groups indicated that participation waned during the teen years. Less than 15 percent in each group participated as teenagers.

The most useful experiences for both 4-H alumni and other participants came from contact with other people within "the program." In addition, opportunities to develop skills and make a contribution to the youth program were most highly rated by both groups. While 4-H alumni were less satisfied than other participants on opportunities for leadership, majorities of both groups wanted more leadership opportunities. Finally, the largest contributions to personal development for both groups were learning to work with others and developing a sense of responsibility. Generally, comparisons of rating of experiences indicates 4-H alumni were more satisfied with their organization's contributions to personal development than were participants in other programs.

According to these findings, participation in 4-H and other youth programs, as well, was a positive experience for respondents during their youth. Nevertheless, the general lack of participation by them during the mid and late teen years is cause for concern. Other data within the study

showed that 59 percent of the 4-H alumni dropped out of the program because it no longer met their interests. Furthermore, respondents who reported earning higher grades said they were less satisfied with program contributions to their personal development. Yet, many alumni had disagreed that the program had little to offer junior high and high school students. This discrepancy not withstanding, several recommendations seem in order. They are:

1. Extension should publicize its 4-H programs so that nontraditional (urban) audiences can be better informed of opportunities from participation in 4-H.

2. Programs must be designed for older teens. Particular attention should be given to broadening opportunities for leadership.

3. Efforts should be made to insure that youth activities and programs adequately challenge all youth, regardless of their educational level.

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Table 1. Reduced Weighted Sample Reported by Region, Group, and Sex of Respondent.

Analytical Groups by Sex[a,b]	South	North Central	Northeast	West	Total[c]
4-H Alumni					
Males	268	266	166	127	827
Females	304	219	158	130	811
Total	573	485	324	258	1,638
Other Participants					
Males	1,325	1,333	1,335	1,006	4,999
Females	1,680	1,254	1,241	1,119	5,294
Total	3,005	2,587	2,576	2,125	10,293
Nonparticipants					
Males	828	422	369	480	2,099
Females	660	542	653	407	2,262
Total	1,488	964	1,022	887	4,361

[a]Chi Square = 196.1, df = 6, $p < .0001$ for males: Group X Region.

[b]Chi Square = 58.6, df = 6, $p < .0001$ for females: Group X Region.

[c]Chi Square = 95.1, df = 6, $p < .0001$ for Group X Region.

Table 2. Sex, Race, Age, and Residential Characteristics of Respondents to the National 4-H Alumni Survey.

Background Characteristics (%)		4-H Alumni	Other Participants	Non-Participants	Total
Sex:	Male	50.5	48.6	48.1	48.6
	Female	49.5	51.4	51.9	51.4
	Sample Size	1,646	10,296	4,363	16,305
	Chi Square = 27, df = 2, p < .257				
Race:	White	93.3	92.6	89.3	89.4
	Black	4.7	4.1	13.1	6.5
	Mexican-American	0.6	2.1	3.4	2.3
	Other	1.3	1.3	3.1	1.8
	Sample Size	1,624	10,203	4,290	16,117
	Chi Square = 596.8[a], df = 10, p < .0001				
Age[b]:	18-29	21.6	20.8	13.4	18.9
	30-39	25.1	30.7	20.2	27.4
	40-49	25.3	17.6	11.3	16.7
	50-59	13.7	13.2	13.5	13.3
	60-69	9.7	10.6	23.3	13.9
	70-85	4.6	7.1	18.4	9.8
	Mean	42.3	42.7	51.3	45.0
	S.D.	14.1	15.3	18.0	16.4
	Sample Size	1,619	10,124	4,247	15,990
	F = 456.0, p < .0001				
Residence:					
	Farm/Ranch	28.1	8.4	18.6	13.1
	Open Country	13.8	7.2	8.1	8.2
	Town < 2,500	10.9	6.2	8.3	7.2
	Town 2,500-10,000	18.0	17.9	12.0	16.4
	City 10,000-50,000	12.7	25.2	22.9	23.3
	Metropolitan Area	16.5	35.1	30.0	31.9
	Sample Size	1,619	10,244	4,314	16,177
	Chi Square 997.3, df = 10, p < .0001				

[a]Chi square test was calculated using six racial groups; "Other" includes Asians, American Indians, and Others.

Table 3. Educational Attainments and Achievements of Respondents to the National 4-H Alumni Survey.

Educational Attainment and Achievement (%)	4-H Alumni	Other Participants	Non-Participants	Total
Level of Education:				
Grammar	0.9	0.5	13.1	3.9
Some high school	7.2	4.7	15.8	7.9
High School graduate	35.1	28.0	30.2	29.3
Military/Vocational	5.3	5.1	4.5	4.9
Some college	24.0	25.7	16.2	23.0
College graduate	18.0	22.9	13.1	19.8
Professional degree	9.5	13.2	7.2	11.2
Sample Size	1,626	10,230	4,314	16,170
Chi Square = 2154.5, df = 12, p < .0001				
Academic Achievement:				
D's	0.5	0.9	1.4	1.0
C's and D's	2.7	4.1	4.0	3.9
C's	8.7	7.4	8.2	7.7
B's and C's	24.1	26.4	29.8	27.0
B's	20.1	20.2	18.3	19.7
A's and B's	28.9	26.9	24.1	26.4
Mostly or all A's	15.1	14.2	14.2	14.2
Sample Size	1,594	10,055	3,594	15,243
Chi Square = 74.8[a], df = 14, p < .0001				

[a]Chi square test was calculated using eight grade categories; mostly or all A's is a combination of two categories.

Table 4. Program Era, Entry Age, and Years of Participation in 4-H and Other Youth Programs.

Program Era, Age, and Years of Participation	4-H Alumni (%)	Other Participants (%)
Program Era:		
1975-85	12.8	12.3
1974-66	20.0	24.8
1965 and previous	67.2	63.0
Mean[a]	27.5	27.3
S.D.	14.0	14.7
Sample Size	1,646	10,296
Chi Square = 17.3, df = 3, p < .001		
Entry Age:		
4-6	0.0	7.9
7-8	9.9	38.1
9-10	48.6	23.5
11-12	26.9	17.3
13-19	14.6	13.2
Mean	10.6	9.5
S.D.	1.8	2.6
Sample Size	1,640	10,257
t = 21.45, p < .0001		
Years of Participation:		
1-2	29.6	14.4
3-4	37.5	25.1
5-6	17.4	22.8
7-8	9.1	13.4
9-10	4.5	14.5
11 +	1.9	9.8
Mean	4.1	6.0
S.D.	2.4	3.2
Sample Size	1,639	10,274
t = 28.29, p < .0001		

[a]Represents mean number of years since participation.

Table 5. Mean Ratings of the Usefulness of Program Experiences and Opportunities for Challenges by 4-H Alumni and Other Participants.

Experiences and Opportunities	4-H Alumni		Other Participants	
	Mean Score	Standard Deviation	Mean Score	Standard Deviation
Usefulness of Experiences:				
Projects[a]	4.09	.024	3.78	.010
People[a]	4.36	.019	4.23	.008
Competition/Activities[a]	4.14	.027	3.96	.009
Club meetings[a]	3.81	.024	3.40	.011
Awards/Prizes[a]	3.79	.029	3.34	.014
Exchange trips[a]	2.89	.049	2.41	.015
Opportunities for Challenges and Responsibilities:				
Challenging tasks[a]	3.26	.028	3.19	.011
Making decisions[a]	3.16	.029	2.92	.012
Planning activities	3.23	.030	3.25	.012
Freedom to develop skills[a]	3.79	.026	3.58	.010
Making a contribution	3.54	.028	3.19	.011
Leadership opportunities[a]	3.05	.031	3.16	.012

[a]Significant difference in mean ratings at $t = 1.960$, $p < .05$.

Table 6. Ratings of 4-H Alumni and Other Participants on Contributions to Personal Development Provided by Organizations to Which They Held Membership as Youth.

Area of Personal Development	4-H Alumni		Other Participants	
	Mean Score	Standard Deviation	Mean Score	Standard Deviation
Pride in accomplishment[a]	4.28	.022	3.93	.010
Self-confidence[a]	4.28	.021	3.97	.010
Working with others[a]	4.38	.020	4.31	.008
Leadership skills[a]	3.89	.026	3.64	.012
Ability to communicate[a]	3.87	.025	3.71	.011
Employment skill[a]	3.17	.032	2.78	.014
Responsibility[a]	4.30	.021	4.04	.010
Setting goals[a]	4.20	.023	3.67	.011
Community involvement[a]	3.75	.029	3.52	.012

[a]Significant difference in mean ratings at $t = 1.960$, $p < .05$.

Table 7. Attitudes of 4-H Alumni and Other Participants Toward Youth Development Programs in Which They Participated as Youth.

Attitudes Toward Youth Programs	4-H Alumni		Other Participants	
	Mean Score	Standard Deviation	Mean Score	Standard Deviation
Too much emphasis on competition and awards	1.50	.033	1.59	.014
Had little to offer junior high and high school youth[a]	0.99	.031	1.61	.015
Kept young people buys and out of trouble more than other youth programs[a]	4.16	.026	3.98	.011
Parents and leaders benefited in learning from projects[a]	4.33	.020	3.69	.012
Awards program positive incentive[a]	4.05	.026	3.48	.013
Knowledge and skills gained through participation benefit members in their adult life[a]	4.49	.019	4.04	.010

[a]Significant difference in mean attitude ratings at $t = 1.960$, $p < .05$.

Table 8. Ratings of 4-H Alumni and Other Participants on the Degree of Influence Program participation had on Education and Career Expectations.

Education and Career Expectations	4-H Alumni		Other Participants	
	Mean Score	Standard Deviation	Mean Score	Standard Deviation
High school education[a]	2.99	.036	2.90	.015
College education	2.50	.035	2.45	.015
Job/Career	2.36	.035	2.37	.015
Choice of college	1.88	.033	1.86	.013
Preparing for leadership[a]	3.26	.032	3.12	.013

[a]Significant difference in mean attitude ratings at $t = 1.960$, $p < .05$.

Table 9. 4-H Alumni Comparisons of Contributions of 4-H and Youth Organizations in Which They Held Membership.

Type of Contribution	Percent Acknowledging Contribution From:		
	4-H Program	About the Same	Other Program
Knowledge[a]	40.5	30.8	28.7
Leadership skill[a]	34.1	21.5	44.4
Responsibility[a]	33.8	19.4	46.7
Self-worth[a]	34.3	36.7	29.0
Communication skill	33.1	36.0	31.0
Cooperation	27.8	44.4	27.8

[a]Significant difference determined by Chi Square test, $p < .05$, $n = 860$.

Table 10. Tests of Significance of Selected Development Experiences of 4-H Alumni and Other Participants by Program Era.

Development Experiences for 4-H Alumni and Other Participants	Program Era					
	1975 - 1985		1974 - 1966		1965 or Less	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
4-H Alumni						
Developing personal pride	4.4	0.81	4.2	0.87	4.3	0.89
Developing leadership skills[a]	4.0	1.03	3.7	1.00	3.9	1.06
Too much emphasis on competition	1.5	1.33	1.6	1.22	1.5	1.39
Little to offer older youth[a]	1.3	1.47	1.1	1.29	0.9	1.24
Parents and leaders benefited	4.2	0.83	4.4	0.82	4.4	0.82
Usefulness of projects	4.1	0.87	4.1	0.86	4.1	0.98
Usefulness of club meetings[a]	3.7	1.03	3.8	0.89	3.8	0.99
Given challenging tasks[a]	3.4	1.04	3.4	1.07	3.2	1.15
Making important decisions[a]	3.3	1.13	3.1	1.32	3.2	1.14
Freedom to develop and use skills	3.8	1.00	3.8	1.03	3.8	1.07
Opportunity to lead others[a]	3.4	1.26	3.0	1.24	3.0	1.28
Other Participants						
Developing personal pride	4.1	1.02	3.9	0.90	3.9	1.04
Developing leadership skills	4.1	0.88	3.9	0.94	4.0	1.04
Too much emphasis on competition[a]	1.9	1.46	1.6	1.36	1.5	1.42
Little to offer older youth[a]	1.3	1.25	1.5	1.51	1.7	1.48
Parents and leaders benefited[a]	3.9	1.14	3.5	1.28	3.7	1.23
Usefulness of projects[a]	4.0	0.87	3.7	1.05	3.8	1.02
Usefulness of club meetings	3.3	1.10	3.3	1.01	3.5	1.11
Given challenging tasks	3.1	1.17	3.3	1.04	3.2	1.15
Making important decisions[a]	3.1	1.14	2.9	1.16	2.9	1.25
Freedom to develop and use skills[a]	3.8	1.00	3.6	0.98	3.5	1.16
Opportunity to lead others	3.2	1.20	3.2	1.06	3.1	1.21

[a]Significant difference between program eras as determined by Tukey's w-procedure, $p < .05$.